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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/468,015      | 12/20/1999  | DIETMAR EGGERT       | F71989US            | 3122             |

23720 7590 12/24/2002

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EXAMINER

HUYNH, KIM NGOC

ART UNIT PAPER NUMBER

2836

DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/468,015

Applicant(s)

EGGERT ET AL.

Examiner

Kim Huynh

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102/103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Waga (US 5,529,831). Waga discloses an integrated circuit having an inductor 23 in a coil shape (Figs. 11) to form a low pass filter as illustrated in Fig. 10 with plurality of ESD devices 26 on a IC die/substrate.
3. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee (US 5,831,331) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee (US 5,831,331) in view of Waga (US 5,529,831).
  - a. Lee discloses an integrated circuit essentially as claimed: a substrate 302, plurality of conductive layers 1-3 shape of a coil turn interleaved with a plurality of insulation layers (col. 2, ll. 36-39 and col. 4, ll. 5-16), plurality of vias (114, 116) connecting adjacent to the coil turn. Though Lee does not disclose a plurality of ESD devices connecting to the corresponding coil turn, please note it is inherent that capacitors are formed between the conductive layers according to the laws of physics, and thereby forming a plurality of ESD devices. This is in the exact manner as applicant's embodiment and Waga.

b. As for the shape of the coil and the type of metal, these are unremarkable and conventional modifications which are well within the ability of one having the ordinary skill in the art as matter of choice to utilize any type of metal or shape of the inductor loop to form the integrated inductor as long as it provide an inductor structure which can be used in the circuit of <sup>base</sup> ~~ker~~ to operate with the ESD clamp to provide ESD protection of the circuit in absence of persuasive evidence that a particular shape or type of metal is significant. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). It is further evidence by applicant's own various embodiments as claimed.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. As for the arguments against the Lee reference, please refers to the discussion 3a above.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ikeda (US 5,431,987) further discloses an IC noise filter made of an inductor coil and insulated layers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703) 308-1678.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0658.

A handwritten signature in black ink, appearing to read 'Kim Huynh', with a long horizontal stroke extending to the right.

Kim Huynh  
Primary Examiner  
Art Unit 2836

KH  
November 21, 2002